

Wireless module - RAD-ISM-900-DATA-BD - 2867131

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




Wireless transceiver (transmitter and receiver) with RS-232, RS-485/RS-422 interface, for 900 MHz ISM band (America)

Your advantages

- ✓ Up to 254 slaves can be connected to one master
- ✓ Operates in the license-free 902 - 928 MHz ISM band
- ✓ Frequency hopping spread spectrum
- ✓ Can be programmed for point-to-point, point-to-multipoint, and multipoint-to-point configurations
- ✓ The individual devices can be configured as master, slave or repeater
- ✓ Provides an interface for I/O data transmission between a 900 MHz wireless transmission system and RS-232, RS-422 or RS-485 interfaces



Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 931643
GTIN	4017918931643
Weight per Piece (excluding packing)	215.000 g
Custom tariff number	85176200
Country of origin	Canada

Technical data

Note

Trade restriction	The products are offered exclusively for export outside the EU and the European Economic Area.
-------------------	--

Dimensions

Width	22.5 mm
-------	---------

Wireless module - RAD-ISM-900-DATA-BD - 2867131

Technical data

Dimensions

Height	99 mm
Depth	114.5 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Degree of protection	IP20

Wireless set

Set contents	1 transceiver
--------------	---------------

Wireless path

Direction	Bi-directional
Frequency range	902 MHz ... 928 MHz
Transmission power	1 W
Number of channel groups	4
Number of channels per group	63

Serial interface

Designation	RS-232
Data rate	1,2 / 2,4 / 9,6 / 19,2 / 38,4 kBit/s
Connection method	D-SUB-9 female connector
File format/coding	Asynchronous
Data flow control/protocols	RTS/CTS
Designation	RS-485/RS-422
Data rate	1,2 / 2,4 / 9,6 / 19,2 / 38,4 kBit/s
Connection method	COMBICON plug-in screw terminal block

Supply

Supply voltage	24 V DC
Supply voltage range	9 V DC ... 30 V DC
Typical current consumption	110 mA
Max. current consumption	180 mA

General

Mounting position	any
Assembly instructions	on standard DIN rail NS 35 in accordance with EN 60715
Housing material	Polyamide PA non-reinforced

Standards and Regulations

Electromagnetic compatibility	FCC Part 15.247 / ISC RSS 210
-------------------------------	-------------------------------

Wireless module - RAD-ISM-900-DATA-BD - 2867131

Technical data

Standards and Regulations

Conformance	FCC Directive, Part 15.247
	ISC Directive RSS 210
UL, USA/Canada	Class I, Div. 2, Groups A, B, C, D

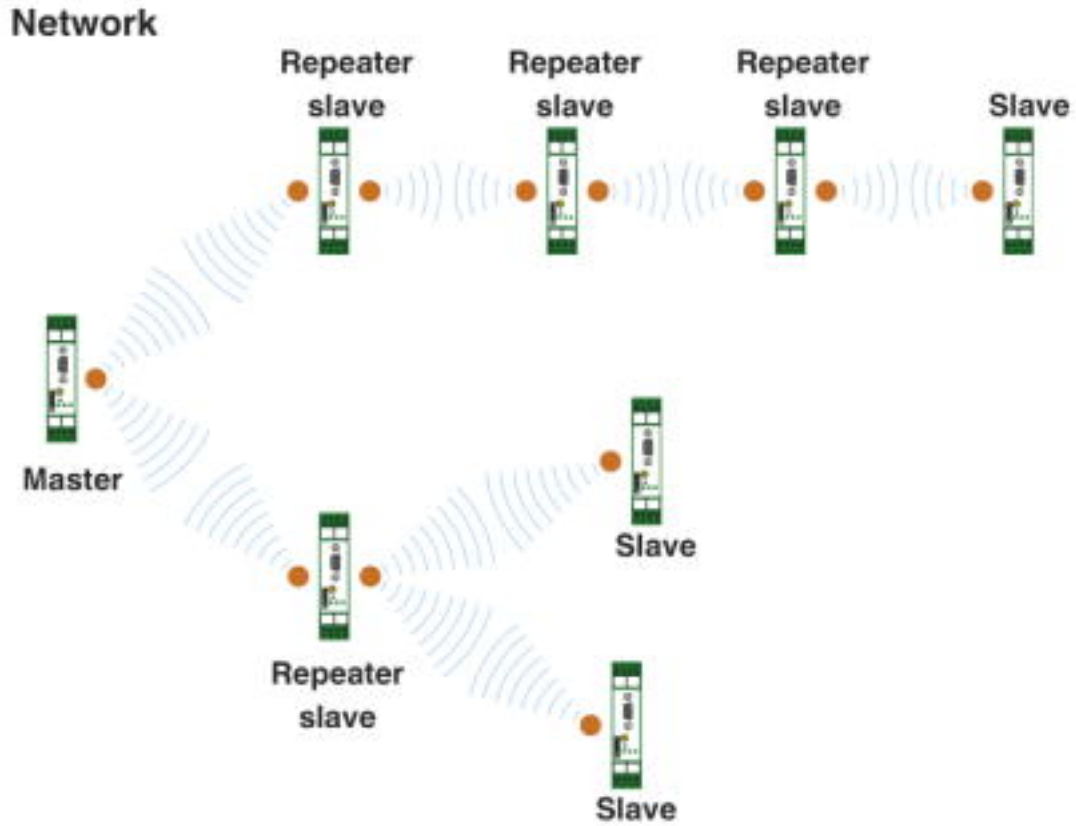
Connection data

Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	4 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12
Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3

Drawings

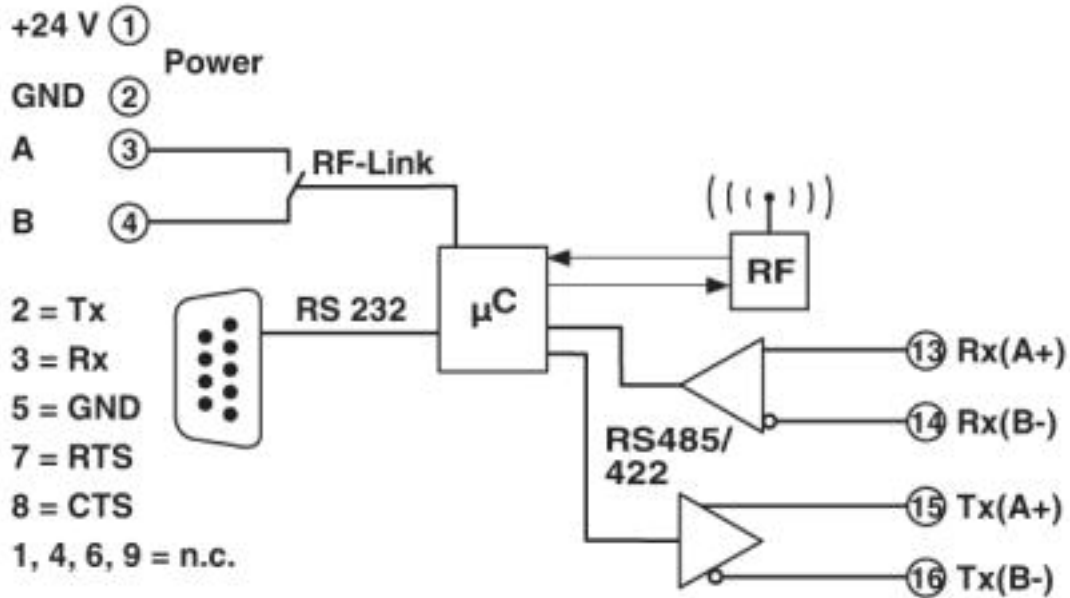
Wireless module - RAD-ISM-900-DATA-BD - 2867131

Application drawing



Wireless module - RAD-ISM-900-DATA-BD - 2867131

Block diagram



Classifications

eCl@ss

eCl@ss 4.0	27250312
eCl@ss 4.1	27250312
eCl@ss 5.0	27242208
eCl@ss 5.1	27242208
eCl@ss 6.0	27242208
eCl@ss 7.0	27242208

ETIM

ETIM 2.0	EC000310
ETIM 3.0	EC000310
ETIM 4.0	EC000310
ETIM 5.0	EC000310

UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	43223108
UNSPSC 11	39121008
UNSPSC 12.01	43223108
UNSPSC 13.2	43223108

Wireless module - RAD-ISM-900-DATA-BD - 2867131

Accessories

Accessories

Adapter cable

Antenna cable - RAD-CON-MCX-N-SB - 2867717



Antenna cable, outside diameter: 2.5 mm (0.1 in.), inner conductor: stranded, attenuation: 0.9 dB at 900 MHz, connection: MCX (male) -> N (female), cable length: 1.2 m (4 ft.)

Antenna cable - RAD-CON-SMA-N-SS - 2867403



Antenna cable, outside diameter: 2.5 mm (0.1 in.), inner conductor: stranded, attenuation: 0.9 dB at 900 MHz, connection: SMA (male) -> N (male), cable length: 1.2 m (4 ft.)

Antenna cable - RAD-CON-MCX-MCX-SS - 2867607



Antenna cable, outside diameter: 2.8 mm (0.11 in.), inner conductor: stranded, attenuation: 0.9 dB at 900 MHz, connection: MCX (male) -> MCX (male), cable length: 0.3 m (1 ft.)

Antenna cable - RAD-CON-MCX90-N-SS - 2885207



Antenna cable, outside diameter: 2.5 mm (0.1 in.), inner conductor: stranded, attenuation: 0.9 dB at 900 MHz, connection: 90° MCX (male) -> N (male), cable length: 1.2 m (4 ft.)

Antenna cable - RAD-CON-MCX-RPSMA-EX - 2885621



Antenna barrier, installation: Class I, Div. 1, Grps. A, B, C, D; Class II, Div. 1, Grps. F, G, frequency range: 0.3G Hz ... 6 GHz, connection: RSMA (male) -> MCX (male), incl. 0.7 m / 2.3 ft. connection cable, UL HazLoc approval

Wireless module - RAD-ISM-900-DATA-BD - 2867131

Accessories

Antenna

Antenna - RAD-ISM-900-ANT-OMNI-5 - 2867199



Omnidirectional antenna, 900 MHz, gain: 7 dBi, polarization: linear, opening angle: h/v 360°/30°, degree of protection: IP65, connection: N (female), incl. mounting bracket and mast clips

Antenna - RAD-ISM-900-ANT-OMNI-FG-3-N - 2867791



Omnidirectional antenna, 900 MHz, gain: 5 dBi, polarization: linear, opening angle: h/v 360°/28°, degree of protection: IP65, connection: N (female), incl. mounting bracket and mast clips

Antenna - RAD-ISM-900-ANT-YAGI-3-N - 2867801



Directional antenna, 868 MHz / 900 MHz, gain: 5 dBi, polarization: linear, opening angle: h/v 168°/78°, degree of protection: IP65, connection: N (female), incl. mounting bracket and mast clips

Antenna - RAD-ISM-900-ANT-YAGI-6.5-N - 2867814



Directional antenna, 868 MHz / 900 MHz, gain: 8.5 dBi, polarization: linear, opening angle: h/v 100°/62°, degree of protection: IP65, connection: N (female), incl. mounting bracket and mast clips

Antenna - RAD-ISM-900-ANT-YAGI-6.5-25-AS - 2867827



Panel antenna with surge protection, adapter cable MCX->N and assembly material, IP65 protection, gain 8.5 dBi, cable length 7.6 m, connection N (female)

Wireless module - RAD-ISM-900-DATA-BD - 2867131

Accessories

Antenna - RAD-ISM-900-ANT-YAGI-6.5-50-AS - 2867830



Panel antenna with surge protection, adapter cable MCX->N and assembly material, IP65 protection, gain 8.5 dBi, cable length 15.2 m, connection N (female)

Antenna - RAD-ISM-900-ANT-OMNI-0-6 - 2867160



Omnidirectional antenna, 900 MHz, gain: 2 dBi, polarization: linear, opening angle: h 360°, degree of protection: IP65, connection: MCX (male), incl. 2 m / 6.5 ft. connecting cable and mounting bracket for wall mounting

Antenna - RAD-ISM-900-ANT-OMNI-FG-6-N - 2885579



Omnidirectional antenna, 900 MHz, gain: 8 dBi, polarization: linear, opening angle: h/v 360°/15°, degree of protection: IP65, connection: N (female), incl. mounting bracket and mast clips

Coaxial adapter

Antenna splitter - RAD-ISM-900-ANT-4 - 2867050



4-way distributor for antenna signals (antenna splitter), MCX connection (female)

Coaxial cable

Antenna cable - RAD-CAB-RG58-10 - 2867364



Antenna extension cable, length: 10 ft

Wireless module - RAD-ISM-900-DATA-BD - 2867131

Accessories

Antenna cable - RAD-CAB-RG58-20 - 2867212



Antenna extension cable, length: 20 ft

Antenna cable - RAD-CAB-RG213-25 - 2867597



Antenna extension cable, length: 25 ft

Antenna cable - RAD-CAB-RG213-40 - 2867377



Antenna cable, outside diameter: 10 mm (0.4 in.), inner conductor: solid, attenuation: 2.9 dB at 900 MHz, connection: 2 x N (male), cable length: 12 m (40 ft.)

Antenna cable - RAD-CAB-RG213-50 - 2867225



Antenna cable, outside diameter: 10 mm (0.4 in.), inner conductor: solid, attenuation: 3.5 dB at 900 MHz, connection: 2 x N (male), cable length: 15 m (50 ft.)

Antenna cable - RAD-CAB-PFP400-60 - 2867380



Antenna cable, outside diameter: 10 mm (0.4 in.), inner conductor: solid, attenuation: 2.5 / 4.2 / 6.3 dB at 0.9 / 2.4 / 5.8 GHz, connection: 2x N (male), cable length: 18 m (60 ft.)

Wireless module - RAD-ISM-900-DATA-BD - 2867131

Accessories

Antenna cable - RAD-CAB-PFP400-80 - 2867393



Antenna cable, outside diameter: 10 mm (0.4 in.), inner conductor: solid, attenuation: 3.3 / 5.6 / 8.4 dB at 0.9 / 2.4 / 5.8 GHz, connection: 2x N (male), cable length: 24 m (80 ft.)

Antenna cable - RAD-CAB-PFP400-100 - 2867238



Antenna cable, outside diameter: 10 mm (0.4 in.), inner conductor: solid, attenuation: 4.1 / 6.9 / 10.4 dB at 0.9 / 2.4 / 5.8 GHz, connection: 2x N (male), cable length: 30 m (100 ft.)

Antenna cable - RAD-CAB-LMR600-125 - 2885210



Antenna extension cable, length: 125 ft

Antenna cable - RAD-CAB-PFP600-150 - 2885184



Antenna cable, outside diameter: 15 mm (0.6 in.), inner conductor: solid, attenuation: 3.9 / 6.8 / 10.4 dB at 0.9 / 2.4 / 5.8 GHz, connection: 2x N (male), cable length: 45 m (150 ft.)

Antenna cable - RAD-CAB-PFP900-200 - 2885197



Antenna extension cable, length: 200 ft

